# Prevention of Significant Air Quality Deterioration Review Georgia-Pacific Wood Products LLC - Monticelle MDF, located in Monticello, Georgia (Jasper County)

## FINAL DETERMINATION

SIP/Title V Permit Application No. 16820 August 2007



State of Georgia
Department of Natural Resources
Environmental Protection Division

Air Protection Branch

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Stationary Source Permitting Program

Planning & Support Program

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## **BACKGROUND**

On July 11, 2006, Georgia-Pacific Wood Products - Monticello MDF Plant (hereafter Georgia-Pacific MDF) submitted an application for an air quality permit to increase annual production capacity from 250 to 325 million square feet at this plant. The facility is located at 791 Georgia-Pacific Road in Monticello, Jasper County. The proposed project will also include the following modifications:

- Conversion of the Regenerative Thermal Oxidizer (RTO) controlling the dryers and press to a Hybrid Thermal Catalytic Oxidizer (Hybrid TCO), allowing operation in either thermal or catalytic mode
- Ability to import steam from the Plywood Plant Boiler to supply steam to the MDF Plant, as needed
- Installation of a pneumatic system to transport MDF trim to the fuel house bin for the Plywood Plant Boiler
- Include the remaining sources (wet-line equipment, laminating pre-finishing equipment and sanding operations, Source Codes 2101, 2102, 2103, 2104, 2201, 2202, 2203, 2300) at the Panelboard Plant into the Title V permit for the MDF Plant

On May 14, 2007, the Division issued a Preliminary Determination stating that the modifications described in Application No. 16820 should be approved. The Preliminary Determination contained a draft Air Quality Permit for the construction and operation of the modified equipment.

The Division requested that Georgia-Pacific MDF place a public notice in a newspaper of general circulation in the area of the existing facility notifying the public of the proposed construction and providing the opportunity for written public comment. Such public notice was placed in *The Monticello News* (legal organ for Jasper County) on June 7, 2007. The public comment period expired on July 9, 2007.

During the comment period, comments were received from U.S. EPA Region IV and the facility. There were no comments received from the general public.

A copy of the final permit is included in Appendix A. A copy of written comments received during the public comment period is provided in Appendix B.

## **U.S. EPA REGION 4 COMMENTS**

Comments were received from Jim Little, U.S. EPA Region 4, by email on July 6, 2007. Each comment is reproduced below, followed by the Georgia Environmental Protection Division (EPD) responses.

#### Comment 1

<u>Fine Particulate Matter</u> -  $PM_{2.5}$  is a regulated NSR pollutant that will be emitted as a result of the proposed modification but that is not mentioned in the draft permit package.  $PM_{2.5}$  should be acknowledged as a regulated NSR pollutant in the final determination. At the discretion of the Georgia Environmental Protection Division (GEPD), it could be stated that GEPD is following EPA's guidance in using  $PM_{10}$  as a surrogate for  $PM_{2.5}$  until final  $PM_{2.5}$  NSR implementation rules are adopted.

**EPD Response:** EPA is correct.  $PM_{2.5}$  is a regulated NSR pollutant that will be emitted as a result of the proposed modification. Georgia EPD is following EPA's guidance in using  $PM_{10}$  as a surrogate for  $PM_{2.5}$  until final  $PM_{2.5}$  NSR implementation rules are adopted.

## **Comment 2**

Air Quality Impact Analysis for Particulate Matter - In the air quality impact analysis section of the preliminary determination, GEPD provides modeling results to demonstrate compliance with a  $PM_{10}$  annual average ambient concentration limit stated as being a national ambient air quality standard (NAAQS). The annual average  $PM_{10}$  NAAQS was revoked by EPA on October 17, 2006. However, an annual average  $PM_{10}$  ambient air quality standard may still exist as an applicable requirement in state rules. We request that you clarify this point in the final determination.

**EPD Response:** EPD agrees. The  $PM_{10}$  annual average ambient concentration limit is not an applicable requirement in Georgia state rules. Table 6-5 in the NAAQS Analysis Results section is updated as follows to remove any reference to the annual average  $PM_{10}$  NAAQS limit:

Pollutant	Averaging Period	Year	UTM East (km)	UTM North (km)	Maximum Impact (ug/m³)	Background (ug/m³)	Total Impact (ug/m³)	NAAQS (ug/m³)	Exceed NAAQS?
$NO_2$	Annual	1991	248.245	3684.821	14.63	14	28.63	100	No
$PM_{10}$	24-Hour	1989	248.237	3684.907	93.5	38	131.5	150	No

## Comment 3

<u>Boiler MACT Standards</u> - GEPD appropriately cites the boiler maximum achievable control technology (MACT) standards in 40 CFR part 63, subpart DDDDD as applicable requirements. Please note, however, that these standards were vacated by the U.S. Court of Appeals for the District of Columbia Circuit in a decision issued June 8, 2007. Because of the procedure by which the Court's decisions are implemented, the Court's vacatur has not yet taken effect. We raise this point simply to say that at some future date GEPD may have to remove or otherwise revise the provisions of the permit related to the boiler MACT standards.

**EPD Response:** The Court ruled on July 30, 2007 that the standard is vacated. Condition 3.3.23 has been removed.

3.3.23 [Reserved]

## **Comment 4**

Additional Comment - On page 9 of the preliminary determination, GEPD states that "None of the sources involved in this project are being physically modified ...." We view the change being made to the oxidation control system as a physical change of an emissions unit because control devices are generally considered part of the emissions units they control. This is merely an observation and does not affect the permitting process since the project is undergoing PSD review anyhow.

**EPD Response:** EPD agrees. The change being made to the RTO is considered a physical change of an emissions unit. Since an RTO, the current control equipment, and a TCO can achieve the same VOC control efficiency, both are considered BACT. Thus, the facility is being authorized to modify the RTO into a TCO. As observed by EPA, no change need be made to the permit.

## **Georgia-Pacific Wood Products - Monticello MDF Plant COMMENTS**

Comments were received from Tammy Wyles, Director for Environmental Regulatory Affairs and Permitting, by email on July 9, 2007. Each comment is reproduced below, followed by the Georgia Environmental Protection Division (EPD) responses.

## **Comment 1**

Page 1, Paragraph 5 – this paragraph lists equipment that was incorporated from the shutdown Panelboard Plant. Included in that list is source "2102A". As you are aware, a Title V permit renewal application was submitted for the MDF/Panelboard Plant in early 2007. EPD's Title V application software would not accept five digits for a source number. As such, the source number for this equipment, in that application, was changed from 2102A to 2103. Similarly, and for the same reason, in the Title V renewal application, source number 2202A was changed to 2203. Also, the equipment list does not include the ovens and heaters which were maintained from the Panelboard Plant (note, the Title V renewal application assigned a source number of 2104 for this equipment). GP requests that changes be made as needed to be consistent with the pending Title V permit and that the ovens and heaters be added to the list

The last sentence in the paragraph mentions the removal of the propane vaporizer from the current Panelboard Title V Permit. This equipment is currently listed in the Title V Permit for the MDF Plant (emission unit 3980) – it is not included in the Title V Permit for the Panelboard Plant. As such, GP suggests that this be changed to reflect the fact that this equipment is currently listed in the MDF Plant Permit, not the Panelboard Permit.

**EPD Response**. The Division agrees with renaming Emission Units 2102A and 2202A in Table 3.1.1. As requested by the facility, the Ovens and Heaters (Source Code 2104) have been added to Table 3.1.1. These natural gas fired burners have a combined heat capacity of 32 million Btu per hour. Conditions 3.4.3 and 3.4.5 have been modified to include this emission unit.

With regard to the propane vaporizer that has never been installed, the Division acknowledges that the propane vaporizer (Source Code: 3980) is to be removed from the <u>MDF</u> Title V Permit, and not the <u>Panelboard</u> Title V Permit. The process description for this modification in Section 1.3 is updated.

- 3.4.1 The Permittee shall not cause, let, suffer, or allow emissions from the following Emission Unit ID Nos. 3404, 3407, 3450, 3508, 3532, 3706, 3901, 2102, 2103, 2104, 2202, 2203 and 2300 the opacity of which is equal to or greater than forty (40) percent.
- 3.4.5 The Permittee shall not fire any fuel that contains greater than 2.5-weight percent sulfur in the Boiler (Source Code: 3460), the Hot Oil System (Source Code: 3550) and the Ovens and Heaters (Source Code: 2104).

## Comment 2

Page 3, Table under Section 3.1.1 – with regard to the Title V renewal application submitted in early 2007 and as discussed above, EPD's Title V application software would not accept five digits for a source or control device number. As such, the control device numbers for the two rotary bed protectors, in that application, were changed from 3720A and 3720B to 3721 and 3722, respectively. GP requests that changes be made as needed to be consistent with the pending Title V permit.

**EPD Response.** The Division agrees. The requested changes have been made.

## Comment 3

Page 4, Table at top of page – the Panel Baghouse, 1821, will not serve the Wet Line Prefinishing equipment (2103) and should be removed from the list of control devices for that area.

Also, in that same table, the control device for the 2201, the Laminating Line Prefinishing Coating equipment, should be listed as "filter" instead of "none".

In the table, the Panel Baghouse, 1821, also needs to be removed from the list of control devices for the Laminating Line Prefinishing Material Transfer equipment (2203).

This table also lists Control Devices 2901, 2903 and 2822 as being in use for the Perforator (2300). As detailed in GP's February 23, 2007 letter to Mr. John Yntema as part of the Title V renewal process (you were copied on this letter), an April 2003 letter to the Georgia EPD allowed for the operation of a portable shop grade de-dust system to collect fugitive dust from this source. That equipment should now be reflected in the permit and the reference to Cyclones 2901, 2903 and 2822 should be removed.

**EPD Response.** The Division agrees. The requested changes have been made.

## **Comment 4**

Page 4, Table near bottom of page in Section 3.3 - As presented in Attachment B to the PSD permit application, the hourly emission rate for Emission Source 3900 should be shown as 0.020 pound per hour.

**EPD Response.** The Division disagrees. The current hourly  $PM_{10}$  emission rate from the Sanderdust Silo Cyclone Baghouse (Source Code: 3900) is 0.015 pounds per hour. This limit was in the facility's initial Title V Permit for the MDF Plant, included as a result of the PSD BACT review. No change will be made to this table.

## **Comment 5**

Page 5, Condition 3.3.9 – condition is vague as written. In order to ensure that the catalyst remains in proper operating condition, the regulatory language of 40 CFR 63, Subpart DDDD, Table 7(4), requiring an activity level analysis every 12 months, should be included in the condition. If the regulatory language is included elsewhere in the permit, then this condition should be removed.

**EPD Response.** The Division disagrees. This is an appropriate general condition that requires the facility to maintain the catalyst layer to ensure proper operation of the Hybrid TCO. The proper operation of the Hybrid TCO is required to provide reasonable assurance of compliance with the VOC BACT limit in Condition 3.3.8. Condition 5.2.6 contains the details of a monitoring requirement to assure compliance with Condition 3.3.9. As requested by the facility, in accordance with the requirements of Subpart DDDD, the Division has reworded Condition 5.2.6 as follows:

5.2.6 The Permittee shall check and verify the activity level of the catalyst in the Hybrid TCO (Source Code: 3720) at least once every 12 months in accordance with Condition 3.3.9. Upon determining the catalytic activity has dropped below 95% DRE, as determined by the catalyst activity test, the Permittee shall take corrective action as soon as realistically possible (e.g., replace or clean catalyst, operate at higher temperature, etc.) and notify the Division within 30 days.

## Comment 6

Page 8, Table 3.3.21 – this table, taken from 40 CFR 63, Subpart QQQQ, specifies a limit for other interior panels of 0.17 lb HAP/gallon solids. Section 63.4681 defines "other interior panels" as, "...panels that are sold for uses other than interior wall paneling, such as coated particleboard, hardboard, and perforated panels". At the Monticello MDF facility, panels are not specifically finished for the purposes of being "perforated panels". Instead, approximately 1 percent of the panels, that are manufactured as "interior wall paneling and tileboard" are brought back from storage and are perforated to meet final customer demand. There is no difference in the finishing or manufacturing of the small percentage of the panels that are ultimately "perforated" versus the panels that are not perforated. The act of perforating is a value-added activity that takes place after, and sometimes well after, the panel is manufactured. In fact, as these panels are being produced, the final use is not typically known. Since 95% or more of the panels are not perforated, and the manufacturing of the panels is identical (with the exception of the perforations), it has been GP's understanding that all of the interior panels are subject to the limit for "interior wall paneling and tileboard". The use of a 95% threshold is consistent with what is allowed by the rule preamble at 68 FR 31749, May 28, 2003.

**EPD Response.** This is a standard condition that is applicable to existing sources that are subject to 40 CFR 63 Subpart QQQQ requirements. The facility is requesting an interpretation of the rule, which would allow it to classify all products manufactured as interior wall panels, and thus be subject to only the emission limit for interior wall panels. In order for the Division to consider this request, the facility must submit a request for a determination to the Division. Note that Table 3.3.21 in Condition 3.3.21 lists emission limits for all the different types of wood products. Therefore, regardless of the determination, no change to this condition would be necessary.

## **Comment 7**

Page 9, Condition 3.3.23 – the MACT rule for Industrial, Commercial and Institutional Boilers and Process Heaters (40 CFR 63, Subpart DDDDD), was vacated by the DC Circuit Court on June 8, 2007. As such, this rule is no longer applicable and this condition should be removed from the permit.

**EPD Response.** Please refer to the Division's response to EPA Comment 3.

#### **Comment 8**

Page 9, Condition 3.3.24 – this condition references a compliance date of October 1, 2008. This was an extended deadline provided in a February 16, 2006 rule that amended the original rule. The original compliance deadline was October 1, 2007. The one-year extension in the compliance date was vacated by the DC Circuit Court on June 18, 2007. GP will continue to review the outcome of the Court ruling and, if needed, will request a 1-year extension for compliance from the EPD as allowed under 40 CFR 63.6(i)(4)(i)(A).

**EPD Response.** Since the vacatur is not yet final, the date of October 1, 2007 cannot yet be included in the permit. Yet October 1, 2007 will soon be incorrect. Therefore, Condition 3.3.24 is modified as follows to remove the reference to the compliance date of 40 CFR 63 Subpart DDDD:

3.3.24 The Permittee shall comply with all applicable provisions of 40 CFR 63, Subpart DDDD – "National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood

Products" as it applies to the Flash Tube Dryer (Source Code: 3407) and the Former/Press (Source Code: 3508).

## **Comment 9**

Page 9, Condition 3.4.1 – the equipment list in this condition makes reference to emission source numbers 2102A, and 2202A. As discussed above, with regard to the recent Title V renewal application, EPD's Title V application software would not accept five digits for a source number. As such, the source numbers in that application, were changed from 2102A and 2202A to 2103 and 2203, respectively. GP requests that changes be made as needed to be consistent with the pending Title V permit.

**EPD Response.** The Division agrees. The requested changes have been made.

3.4.1 The Permittee shall not cause, let, suffer, or allow emissions from the following Emission Unit ID Nos. 3404, 3407, 3450, 3508, 3532, 3706, 3901, 2102, 2103, 2104, 2202, 2203 and 2300 the opacity of which is equal to or greater than forty (40) percent.

#### Comment 10

Page 10, Condition 3.4.8 – this condition references Condition 3.4.3. Instead, we believe that this should refer back to Condition 3.4.7.

**EPD Response.** The Division agrees. The requested changes have been made.

3.4.8 The Permittee shall comply with the emission limitation specified in Condition No. 3.4.7 by the following method: The application of low solvent coating technology where the 24-hour weighted average of all coatings on a single coating line or operation meets the limits stated in Condition No. 3.4.7. Averaging across lines is not allowed.

## **Comment 11**

Page 11, Condition 3.5.1 – the sources to which this condition applies should be listed as 2101 and 2201, not 2101 and 2102.

**EPD Response.** The Division agrees. The requested changes have been made.

3.5.1 The Permittee shall clean or replace each of the spray booth exhaust filters located on Emission Unit ID Nos. 2101 and 2201 semiannually.

## **Comment 12**

Page 12, Condition 4.1.3m – this sub-condition makes reference to the use of Method 204 for criteria and verification of a press enclosure. As discussed previously, 40 CFR 63, Subpart DDDD, Section 63.2267 requires that, for a press enclosure, that a facility either utilize a "wood products enclosure" or measure the capture efficiency. In conjunction with the prior PSD permit for this facility, the enclosure has already been tested (November 1999) and found to meet the definition of a "total permanent enclosure", which means it also meet the definition of a "wood products enclosure" as defined by 40 CFR, Subpart 63, Subpart DDDD. As such, the capture efficiency testing contained in Subpart DDDD does not apply to the press enclosure at the Monticello MDF Plant. This test method should be removed from the list.

**EPD Response.** The reference to 40 CFR 63 Subpart DDDD is removed from Condition 4.1.3.m. However, this general testing condition states Test Method 204 must be used to test for press enclosure and it will remain in this permit amendment. This condition only specifies the test method that must be used to test for press enclosure, and it does not require any testing.

- 4.1.1 Performance and compliance tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants. The methods for the determination of compliance with emission limits listed under Sections 3.2, 3.3, 3.4 and 3.5 which pertain to the emission units listed in Section 3.1 are as follows:
  - m. Method 204 (Methods 204A through F) shall be used for criteria and verification of a press enclosure.

#### **Comment 13**

Page 14, Condition 4.2.4 (continued from prior page) – the sentence that ends at the top of the page states that the Hybrid TCO, "...shall be operated in catalytic mode at all times". Since this condition is referring to test conditions only, that sentence should end as "...shall be operated in catalytic mode at all times during the test".

**EPD Response.** The Division agrees. The requested changes have been made.

4.2.4 Within 60 days after achieving the maximum production rate at which the affected equipment will be operated, but no later than 180 days after initial startup of the plant following completion of the project, the Permittee shall conduct a VOC performance test on the stack associated with the Flash Tube Dryer (Source Code: 3407), the Former/Press (Source Code: 3508), and the Hybrid TCO to verify compliance with the applicable limits specified in Conditions 3.2.1 and 3.3.8. For the purpose of this test, the Hybrid TCO (Source Code: 3720) shall be operated in catalytic mode at all times during the test. This test shall also be used to define an excursion value for the combustion temperature while the Hybrid TCO is operating in catalytic mode.

#### Comment 14

Page 14, Condition 4.2.5c – this sub-condition allows for a reduction in testing frequency from every 24 months to every 48 months, "...if testing demonstrates that emissions are less than 50% of allowable". This particular sub-condition addresses requirements for testing for destruction efficiency. While a threshold of 50 percent makes sense for the purposes of mass emission limits (see sub-conditions 4.2.5a and b), it does not make sense in the context of destruction efficiencies. GP requests that the testing frequency for destruction just be set to the frequency of 48 months or once per Title V permit term.

**EPD Response.** The Division agrees. The requested changes have been made.

- 4.2.5 The Permittee shall conduct the following performance tests, at the frequency specified, to verify compliance with the emission limits specified in Section 3 of this permit.
  - a. Particulate matter (PM) emissions from the stack associated with the Flash Tube Dryer (Source Code: 3407), the Former/Press (Source Code: 3508), and the Hybrid TCO shall be conducted at 24-month intervals; the frequency may be reduced to once per 48-month intervals, if testing demonstrates that emissions are less than 50% of allowable.

- b. Volatile Organic Compounds (VOC) emissions from the stack associated with the Flash Tube Dryer (Source Code: 3407), the Former/Press (Source Code: 3508), and the Hybrid TCO shall be conducted at 24-month intervals; the frequency may be reduced to once per 48-month intervals, if testing demonstrates that emissions are less than 50% of allowable.
- c. HAP destruction efficiency from the stack associated with the Flash Tube Dryer (Source Code: 3407), the Former/Press (Source Code: 3508), and the Hybrid TCO shall be conducted at 48-month intervals. This test shall also be used to verify or establish the operating temperature for the Hybrid TCO.

After less frequent testing has been allowed, because a test result is lower than the threshold specified in any of the above paragraphs, if a subsequent test shows emissions are above the that threshold, the Permittee shall revert to the more frequent testing until new test results show emissions are below the threshold.

#### Comment 15

Page 14, Condition 4.2.6 – this condition makes reference to the testing to determine the capture efficiency for the board press enclosure. As discussed previously, 40 CFR 63, Subpart DDDD, Section 63.2267 requires that, for a press enclosure, that a facility either utilize a "wood products enclosure" or measure the capture efficiency. In conjunction with the prior PSD permit for this facility, the enclosure has already been tested (November 1999) and found to meet the definition of a "total permanent enclosure", which means it also meet the definition of a "wood products enclosure" as defined by 40 CFR, Subpart 63, Subpart DDDD. As such, the capture efficiency testing contained in Subpart DDDD does not apply to the press enclosure at the Monticello MDF Plant. This condition should be removed from the list.

**EPD Response.** The Division agrees, and Condition 4.2.6 is deleted.

## **Comment 16**

Page 13, Conditions 4.2.1 through 4.2.4 – these conditions require testing, "Within 60 days after achieving the maximum production rate at which the affected equipment will be operated, but no later than 180 days after initial startup...". Georgia-Pacific requests that this requirement be changed to, "Within 60 days after achieving the maximum production rate at which the affected equipment will be operated, but no later than 180 days after switching to catalytic operating mode...".

**EPD Response.** The Division agrees. The requested changes in wording have been made in Conditions 4.2.1 to 4.2.4.

- 4.2.1 Within 60 days after achieving the maximum production rate at which the affected equipment will be operated, but no later than 180 days after switching to catalytic operating mode following completion of the project, the Permittee shall conduct a PM performance test on the stack associated with the Flash Tube Dryer (Source Code: 3407), the Former/Press (Source Code: 3508), and the Hybrid TCO to verify compliance with the applicable PM limit specified in Conditions 3.3.8.
- 4.2.2 Within 60 days after achieving the maximum production rate at which the affected equipment will be operated, but no later than 180 days after switching to catalytic operating mode following

completion of the project, the Permittee shall conduct a CO performance test on the stack associated with the Flash Tube Dryer (Source Code: 3407), the Former/Press (Source Code: 3508), and the Hybrid TCO to verify compliance with the applicable CO limit specified in Conditions 3.3.8.

- 4.2.3 Within 60 days after achieving the maximum production rate at which the affected equipment will be operated, but no later than 180 days after switching to catalytic operating mode following completion of the project, the Permittee shall conduct a NOx performance test on the stack associated with the Flash Tube Dryer (Source Code: 3407), the Former/Press (Source Code: 3508), and the Hybrid TCO to verify compliance with the applicable NOx limit specified in Conditions 3.3.8.
- 4.2.4 Within 60 days after achieving the maximum production rate at which the affected equipment will be operated, but no later than 180 days after switching to catalytic operating mode following completion of the project, the Permittee shall conduct a VOC performance test on the stack associated with the Flash Tube Dryer (Source Code: 3407), the Former/Press (Source Code: 3508), and the Hybrid TCO to verify compliance with the applicable limits specified in Conditions 3.2.1 and 3.3.8. For the purpose of this test, the Hybrid TCO (Source Code: 3720) shall be operated in catalytic mode at all times during the test. This test shall also be used to define an excursion value for the combustion temperature while the Hybrid TCO is operating in catalytic mode.

## **Comment 17**

Page 14, Condition 4.2.7 – this condition requires that the Hybrid TCO undergo testing if it is switched to operate in another mode for 180 days. Switching the unit from one mode of operation to the other would not be expected to impact operation as long as a different catalyst has not been added and the catalyst activity tests are conducted as required by the MACT rule. The unit has already been tested in thermal mode and appropriate operating parameters have been set. Section 4.2 (Conditions 4.2.1 through 4.2.5) already contains both initial and on-going compliance test requirements. Condition 4.2.8 requires testing if the catalytic bed is replaced or substantially altered. As long as the unit adheres to the operating parameters established in these tests and prior tests operating in thermal mode, additional testing serves no useful purpose and should not be required. GP requests that this condition be removed from the permit.

**EPD Response.** The Division agrees, and Condition 4.2.7 is deleted.

## **Comment 18**

Page 16, Condition 5.2.1b – this condition requires monitoring of the "...gas stream pressure at the inlet of or the pressure drop across the Hybrid TCO...in inches of water". The actual pressure drop measurement does not provide useful information regarding the proper operation of the unit. As such, the facility measures the gas stream pressure at the inlet. There is no need to provide allowance to use pressure drop as a parametric monitoring option. As such, it requested that this sentence be changed to read, "The inlet static pressure of the Hybrid TCO".

**EPD Response.** The Division agrees. The requested changes have been made.

5.2.1 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated parameters on the following equipment. Where such performance

specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.

- a. The combustion zone temperature of the oxidizer retention chamber in the Hybrid TCO (Source Code: 3720) at a position prior to any substantial heat loss/exchange; the temperature-monitoring device shall have an accuracy of at least 2.2% (<sup>0</sup>F).
- b. The inlet static pressure of the Hybrid TCO (Source Code: 3720), in inches of water.

## Comments 19 to 21

Page 16, Condition 5.2.2a – this condition requires that the pressure drop be recorded on a daily basis for four baghouses. Since this requirement has no meaning if a baghouse is not operational, GP requests that the last sentence of the condition be changed to read, "The pressure drop shall be recorded at least once per day or portion of each day of operation".

Page 16, Condition 5.2.2b – this condition requires that the pressure drop be recorded once per shift for the two rotary bed protectors. Since this requirement has no meaning if these units are not operational, GP requests that the last sentence of the condition be changed to read, "The pressure drop shall be recorded at least once per shift that the equipment is operating".

Page 16, Condition 5.2.2c – this condition requires that the pressure drop be recorded on a weekly basis for Baghouse 1821. Since this requirement has no meaning if the baghouse is not operational, GP requests that the last sentence of the condition be changed to read, "The pressure drop shall be recorded at least once per week or portion of each week of operation".

**EPD Response.** The Division agrees. The requested changes have been made.

- 5.2.2 The Permittee shall install, calibrate, maintain, and operate monitoring devices for the measurement of the indicated parameters on the following equipment. Data shall be recorded at the frequency specified below. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
  - a. The pressure drop across the following baghouses: ADS Filter Baghouse (Source Code: 3245), Refiner HP Relay Baghouse (Source Code: 3290), Former/Press Baghouse (Source Code: 3705), and Trim Saw Baghouse (Source Code: 3708). The pressure drop shall be recorded at least once per day or portion of each day of operation.
  - b. The pressure drop across Rotary Bed Protectors #1 and #2 (Source Codes: 3721 and 3722. The pressure drop shall be recorded at least once per shift that the equipment is operating.
  - c. The pressure drop across Panel Baghouse 1821. The pressure drop shall be recorded at least once per week or portion of each week of operation.
  - d. The pressure differentials between the inside and outside of the PTE/press room, which captures VOC emissions from the press (Source Code: 3508). Data shall be recorded once per shift or portion of each shift of operation.

## **Comment 22**

Page 16, Condition 5.2.2d – this condition includes a requirement to monitor the pressure differentials between the inside and outside of the press enclosure. As discussed above, the system is designed, and has been proven through testing, to meet the definition of a "wood products enclosure" and a "total permanent enclosure". By definition, the "direction of airflow…shall be into the enclosure". As such, it is unnecessary to monitor this parameter since the enclosure meets this requirement by design. While this measurement might be appropriate for a partial enclosure, it is not needed for a total enclosure. GP requests that this requirement be removed from the permit.

**EPD Response.** The Division disagrees. The negative pressure is the operating parameter, which is used to monitor HAP capture efficiency. The ongoing monitoring of the negative pressure on the press is needed to provide reasonable assurance of compliance with the capture efficiency PSD limit in Condition 3.2.1. The Division has modified this condition as follows.

6.1.7.c.ix Any reading during operation of the press showing that the pressure differential between the inside and outside of the PTE/press room serving the press (Source Code: 3508) is more than 20 % (in the positive direction) above the threshold value established by the most recent Division-approved performance test. The threshold value is to be established initially within 180 days of the issuance of this permit, and reestablished based on subsequent Division-approved performance test.

## Comment 23

Page 16, Condition 5.2.5 – this condition specifies inspections for three (3) cyclones – 2822, 2901, and 2903. Cyclone 2902, which is also associated with this system, appears to be missing from the list and should be added.

**EPD Response.** The Division agrees. The requested changes have been made.

5.2.5 The Permittee shall, for each week or portion of each week of operation of the emission units controlled by Cyclones 2822, 2901, 2902 and 2903, inspect the exterior of the cyclones for holes in the body or evidence of malfunction in the interior, and take corrective action if a problem is identified. If a problem is found, the Permittee shall record this and note the corrective action taken. A checklist or other similar log may be used for this purpose.

## **Comment 24**

Page 21, Condition 6.1.7c(ii) – the phrase, "(or a value established by the most recent Division-approved performance test)", should be inserted after the term "1600 °F". This is similar to what is allowed for this unit under Condition 6.1.7c(iii) when operating in catalytic mode.

**EPD Response.** The Division agrees. The requested changes have been made.

6.1.7.c.ii Any 3-hour block average of the Hybrid TCO retention chamber temperature that is less than 1600 °F (or a value established by the most recent Division-approved performance test) when the Hybrid TCO (Source Code: 3720) is operating in Thermal Mode.

## Comment 25

Page 22, Condition 6.1.7c(iv) – GP requests that the term "8-hour period" be replaced with "8-hour block period (plant shift basis)" for clarity.

- **EPD Response.** The Division agrees, but has modified the permit condition differently than the applicant requested.
- 6.1.7.c.iv Any 8-hour block period during which the average pressure loss across the rotary bed protectors (Source Codes: 3721 and 3722) is greater than 8 inches of water column.

#### Comment 26

Page 22, Condition 6.1.7c(vi) – the two emission units listed should be 2101 and 2201, not 2101 and 2102.

**EPD Response.** The Division agrees. The requested changes have been made.

6.1.7.c.vi Any failure to perform a required filter change-out on Emission Unit ID Nos. 2101 or 2201.

## Comment 27

- Page 22, Condition 6.1.7c(viii) this condition is unclear as written. GP request that the language in this condition be replaced with, "Any failure to perform the required catalyst activity test in the Hybrid TCO (Source Code: 3720)"
  - **EPD Response.** The Division agrees and has reworded this condition. This excursion condition is required to ensure proper operation of the Hybrid TCO and ensure compliance with the VOC BACT limit.
- 6.1.7.c.viii Any occurrence when the activity level of the catalyst in the Hybrid TCO (Source Code: 3720) is not maintained in accordance with Conditions 3.3.9 and 5.2.6.

## **Comment 28**

Page 26, Condition 6.2.14 – this condition should be removed, as the deadline for this requirement has already passed and the facility has satisfied all of the reporting obligations.

**EPD Response.** The Division agrees, and Condition 6.2.14 is deleted.

## Comment 29

Page 34, Condition 6.2.26 – as Georgia EPD is aware, the original compliance date for 40 CFR 63, Subpart DDDD was October 1, 2007. The deadline was extended one year, to October 1, 2008, as part of a February 16, 2006 rulemaking. The one-year extension in the compliance date was then vacated by the DC Circuit Court on June 18, 2007. Since this ruling occurred less than 180 days prior to the original, October 1, 2007 compliance date, it is not possible to comply with this condition. This is true for the entire industry, not just GP. As such, GP requests that the condition either be removed or that alternative language be included that will allow for compliance given this "last minute" change. Based on our telephone conversation the week of July 2<sup>nd</sup>, we understand that EPD intends to discuss this issue with EPA Region 4 staff.

In addition, in the regulatory citation, the condition makes reference to 40 CFR 70.6(a)(3)(i). This does not appear to be an appropriate regulatory citation for this requirement.

**EPD Response.** The Division agrees, and Condition 6.2.26 is deleted.

## Comment 30

Page 34, Condition 6.2.28 – Cyclone 2902, which is part of the same system, appears to be missing from the list in this condition. This same cyclone appears to be missing from Conditions 5.2.4 and 5.2.5 as well. GP requests that Cyclone 2902 be added to the list in Conditions 5.2.4, 5.2.5, and 6.2.28 as appropriate.

**EPD Response.** The Division agrees. The requested changes have been made. Conditions 5.2.4, 5.25 and 6.2.28 have been modified.

- 5.2.4 The Permittee shall, for each week or portion of each week of operation of the emission units controlled by cyclones 1812, 1814, 1816, 1817, 1818, 2822, 2901, 2902 and 2903, inspect the exterior of the cyclones for holes in the body or evidence of malfunction in the interior, and take corrective action if a problem is identified. If a problem is found, the Permittee shall record this and note the corrective action taken. A checklist or other similar log may be used for this purpose.
- 5.2.5 The Permittee shall, for each week or portion of each week of operation of the emission units controlled by Cyclones 2822, 2901, 2902 and 2903, inspect the exterior of the cyclones for holes in the body or evidence of malfunction in the interior, and take corrective action if a problem is identified. If a problem is found, the Permittee shall record this and note the corrective action taken. A checklist or other similar log may be used for this purpose.
- 6.2.28 The Permittee shall maintain a log indicating the date and the time that each dust collection system (Air Pollution Control Device ID Nos. 1821, 2822, 2901, 2902 and 2903) is inspected for any malfunctions as required by Conditions 5.2.4 and 5.2.5. The logs shall specify if any repair work was performed on the systems and the time and date of any such work. These logs shall be kept available for inspection or submittal for five (5) years from the date of record.

## Comment 31

Page 34, Condition 6.2.29 – the first sentence in this condition requires that the required record be kept, "...for each day or portion of a day...". Since this requirement has no meaning if facility is not operating, GP requests that this language be changed to read, "...for each day or portion of a day that the facility is operating...".

**EPD Response.** The Division agrees. The requested changes have been made.

6.2.29 The Permittee shall, for each day or portion of a day that the facility is operating, maintain a daily record of each finished product manufactured. This record shall be kept on site and available for inspection for at least five years.

## **Comment 32**

Page 34, Condition 6.2.31 – this condition makes reference to recordkeeping associated with the date and

time of each occurrence when the mode of the Hybrid TCO is switched. Based on the wording of the condition, it appears that additional explanation is needed. Going forward, once the unit is converted to a catalytic oxidizer, it will not "switch" between thermal and catalytic mode. The unit will operate in catalytic mode. If the annual catalyst activity test and/or performance tests indicate that the unit needs to operate at a higher temperature in order to maintain the required destruction efficiency, the appropriate adjustment will be made to the temperature set point. As needed, the temperature may continue to be adjusted upward, moving toward more of "thermal mode" until the catalyst is replaced and the temperature is then reduced based on demonstrated compliance at a lower temperature. Therefore, at least some of the time, catalyst life may still remain (catalytic mode) while the unit is operated at a somewhat higher temperature (thermal mode) until the catalyst is replaced. As such, it is likely that there will not be a clear, definitive switch between catalytic and thermal mode. Instead, the unit may progressively operate at higher temperatures if needed.

**EPD Response.** The Division agrees, and Condition 6.2.31 is deleted.

## **Comment 33**

The facility submitted the following comments on the preliminary determination:

- 1. Page 1, Paragraph 1 the fourth bullet lists equipment that was incorporated from the shutdown Panelboard Plant. Included in that list is source "2102A". As you are aware, a Title V permit renewal application was submitted for the MDF/Panelboard Plant in early 2007. EPD's Title V application software would not accept five digits for a source number. As such, the source number for this equipment, in that application, was changed from 2102A to 2103. Similarly, and for the same reason, in the Title V renewal application, source number 2202A was changed to 2203. Also, this bulleted list does not include the ovens and heaters which were maintained from the Panelboard Plant (note, the Title V renewal application assigned a source number of 2104 for this equipment). GP requests that changes be made as needed to be consistent with the pending Title V permit and that the ovens and heaters be added to the list.
- 2. Page 3, Paragraph 6 the equipment numbers need to be updated/corrected as detailed in Comment No. 1 (above).
- 3. Page 7, Paragraph 4 the bulleted list makes reference to four (4) applicable Maximum Achievable Control Technology (MACT) rules that apply at this facility. The last rule on the list, the MACT rule for Industrial, Commercial and Institutional Boilers and Process Heaters (40 CFR 63, Subpart DDDDD), was vacated by the DC Circuit Court on June 8, 2007. As such, this rule is no longer applicable for this facility and all of the associated language should be removed from both the Preliminary Determination document and the draft permit. The last paragraph on Page 7, extending onto Page 8, should be removed.
- 4. Page 8, Paragraph 2 in this language for the Plywood and Composite Wood Products (PCWP) (40 CFR 63, Subpart DDDD) MACT rule, there are several references to a compliance date of October 1, 2008. This was an extended deadline provided in a February 16, 2006 rule that amended the original rule. The original compliance deadline was October 1, 2007. The one-year extension in the compliance date was vacated by the DC Circuit Court on June 18, 2007. GP will continue to review the outcome of the Court ruling and, if needed, will request a 1-year extension for compliance from the EPD as allowed under 40 CFR 63.6(i)(4)(i)(A).

5. Page 10, Step 2 of the BACT analysis – the first sentence starts out, "A Direct Fired Dryer generates...". The dryer at the MDF Plant is of the indirect type. As such, this sentence should be changed to read, "A steam-heated dryer generates...".

- 6. Page 12, Paragraph 1 the words, "(or propane)" should be removed from the fifth sentence, as they facility no longer has the capability to fire propane.
- 7. Page 16, Table 4-3 the emissions that are included in the table are totals for the dryer, press, TCOand pre-filter. A footnote or discussion should be provided stating that, "The emission levels presented are totals for the TCO stack, including the dryer, press, pre-filters and TCO itself".
- 8. Page 21, Table 4-6 the emissions that are included in the table are totals for the dryer, press, TCO and pre-filter. A footnote or discussion should be provided stating that, "The emission levels presented are totals for the TCO stack, including the dryer, press, pre-filters and TCO itself".
- 9. Page 22, Paragraph 2 for the Flash Tube Dryer and Press and Associated Pre-Filter and TCO the first sentence is a requirement to test within 180 days of completion of the project. Georgia-Pacific requests that this requirement be changed to, "...within 180 days of switching to catalytic operating mode".
  - This same paragraph contains a requirement that the facility will also be required to determine the capture efficiency for the board press enclosure per the requirements in 40 CFR 63 Subpart DDDD. Per 40 CFR 63, Subpart DDDD, Section 63.2267 requires that, for a press enclosure, that a facility either utilize a "wood products enclosure" or measure the capture efficiency. The definition of a "wood products enclosure" is equivalent to the definition of a "total permanent enclosure" as defined by 40 CFR 51, Appendix M, Method 204. In conjunction with the prior PSD permit for this facility, the enclosure has already been tested (November 1999) and found to meet the definition of a "total permanent enclosure", which means it also meet the definition of a "wood products enclosure" as defined by 40 CFR, Subpart 63, Subpart DDDD. These test results were submitted to the Georgia EPD. As such, the capture efficiency testing contained in Subpart DDDD does not apply to the press enclosure at the Monticello MDF Plant. This requirement should be removed from the Preliminary Determination and from the Permit.
- 10. Page 22, Paragraph 3 for the Flash Tube Dryer and Press and Associated Pre-Filter and TCO the last sentence allows for a reduction in testing frequency from every 2 years to every 4 years, "...if the performance tests show that emissions are less than 50 percent of the allowable". This particular paragraph discusses the requirements for testing to demonstrate destruction efficiency. While a threshold of 50 percent might make sense for the purposes of mass emission limits, it does not make sense in the context of destruction efficiencies. GP requests that the testing frequency for destruction just be set to the frequency of 48 months or once per Title V permit term.
- 11. Page 22, Paragraph 4 for the Flash Tube Dryer and Press and Associated Pre-Filter and TCO this paragraph discusses the requirement to test the TCO within 180 days of returning operation to thermal mode. The unit has already been tested in thermal mode and appropriate operating parameters have been set. As long as the unit adheres to the operating parameters established in prior tests operating in thermal mode, additional testing serves no useful purpose and should not be required. As such, GP requests that this requirement be removed from the permit.
- 12. Page 23, Paragraph 2 discusses the compliance date of October 1, 2008 under the PCWP MACT rule. As discussed previously, this was an extended deadline provided in a February 16, 2006 rule that amended the original rule. The original compliance deadline was October 1, 2007. The one-year

extension in the compliance date was vacated by the DC Circuit Court on June 18, 2007. GP will continue to review the outcome of the Court ruling and, if needed, will request a 1-year extension for compliance from the EPD as allowed under 40 CFR 63.6(i)(4)(i)(A).

13. Page 23, Paragraph 3 – the second sentence states that the facility shall "...continue to be required to measure and record the gas stream pressure at the inlet of or the pressure drop across the Hybrid TCO". The actual pressure drop measurement does not provide useful information regarding the proper operation of the unit. As such, the facility measures the gas stream pressure at the inlet. There is no need to provide allowance to use pressure drop as a parametric monitoring option. As such, it requested that this sentence be changed to read, "...continue to be required to measure and record the gas stream pressure at the inlet of the Hybrid TCO".

This paragraph also includes a requirement to monitor the negative pressure inside the press system. As discussed above, the system is designed, and has been proven through testing, to meet the definition of a "wood products enclosure" and a "total permanent enclosure". By definition, the "direction of airflow...shall be into the enclosure". As such, it is unnecessary to monitor this parameter since the enclosure meets this requirement by design. While this measurement might be appropriate for a partial enclosure, it is not needed for a total enclosure. GP requests that this requirement be removed from the permit.

- 14. Page 23, Paragraph 2 under Material Handling Equipment the first sentence requires that the pressure drop be read and recorded, "...at least once per day". Since this requirement has no meaning if a baghouse is not operational, GP requests that this language be changed to read, "...at least once per day or portion of each day of operation". Similar language is already included in this paragraph with regard to the requirement to perform visible emissions checks for these same units.
- 15. Page 28, Paragraph 1 under Source Types and Parameters the first sentence makes reference to use of the ISCST dispersion model. The air quality analysis performed as part of this permit application utilized the AERMOD dispersion model. GP requests that the model name be changed from ISCST to AERMOD to accurately reflect the dispersion model that was used for this facility.
- 16. Page 35, Paragraph 9 under Section 3.0: Requirements for Emission Units this language makes reference to the Boiler MACT rule, which has been vacated (see related comment under Comment 3 above).
- 17. Page 36, Paragraph 7 references the requirement to replace or clean the spray booth exhaust filters at a minimum of every two weeks. Condition 3.5.1 of the Permit requires that this activity take place semiannually. The language in the Preliminary Determination needs to be changed to match the actual language contained in Permit Condition 3.5.1.
- 18. Page 36, Paragraph 2 under Section 4.0: Requirements for Testing the last sentence allows for a reduction in testing frequency from every 2 years to every 4 years, "...if the performance tests show that emissions are less than 50 percent of the allowable". This particular paragraph discusses the requirements for testing to demonstrate destruction efficiency. While a threshold of 50 percent might make sense for the purposes of mass emission limits, it does not make sense in the context of destruction efficiencies. GP requests that the testing frequency for destruction just be set to the frequency of 48 months or once per Title V permit term.
- 19. Page 36, Paragraph 3 under Section 4.0: Requirements for Testing this paragraph contains a requirement that the facility will be required to determine the capture efficiency for the board press enclosure per the requirements in 40 CFR 63 Subpart DDDD. Per 40 CFR 63, Subpart DDDD,

Section 63.2267 requires that, for a press enclosure, that a facility either utilize a "wood products enclosure" or measure the capture efficiency. The definition of a "wood products enclosure" is equivalent to the definition of a "total permanent enclosure" as defined by 40 CFR 51, Appendix M, Method 204. As discussed above in Comment 9, the enclosure has already been tested and found to meet the definition of a "total permanent enclosure", which means it also meet the definition of a "wood products enclosure" as defined by 40 CFR, Subpart 63, Subpart DDDD. As such, the capture efficiency testing contained in Subpart DDDD does not apply to the press enclosure at the Monticello MDF Plant. This requirement should be removed from the Preliminary Determination and from the Permit.

Page 36, Paragraph 4 (continues onto Page 37) under Section 4.0: Requirements for Testing – this paragraph discusses the requirement to test the TCO within 180 days of returning operation to thermal mode. The unit has already been tested in thermal mode and appropriate operating parameters have been set. As long as the unit adheres to the operating parameters established in prior tests operating in thermal mode, additional testing serves no useful purpose and should not be required. As such, GP requests that this requirement be removed from the permit.

**EPD Response.** 

The preliminary determination was issued at the same time that the draft permit was issued; unlike the permit, the preliminary determination cannot be altered. I have reviewed the comments made by the applicant regarding the preliminary determination, and they regard issues raised in the comments on particular draft permit conditions. These permit condition comments were addressed and resolved in the final determination.

# APPENDIX A

AIR QUALITY PERMIT 2493-159-0012-V-01-1

# APPENDIX B

WRITTEN COMMENTS
RECEIVED DURING
COMMENT PERIOD